FT-IR Imaging for the Characterization of Drug Release: Identification of the Release Mechanism

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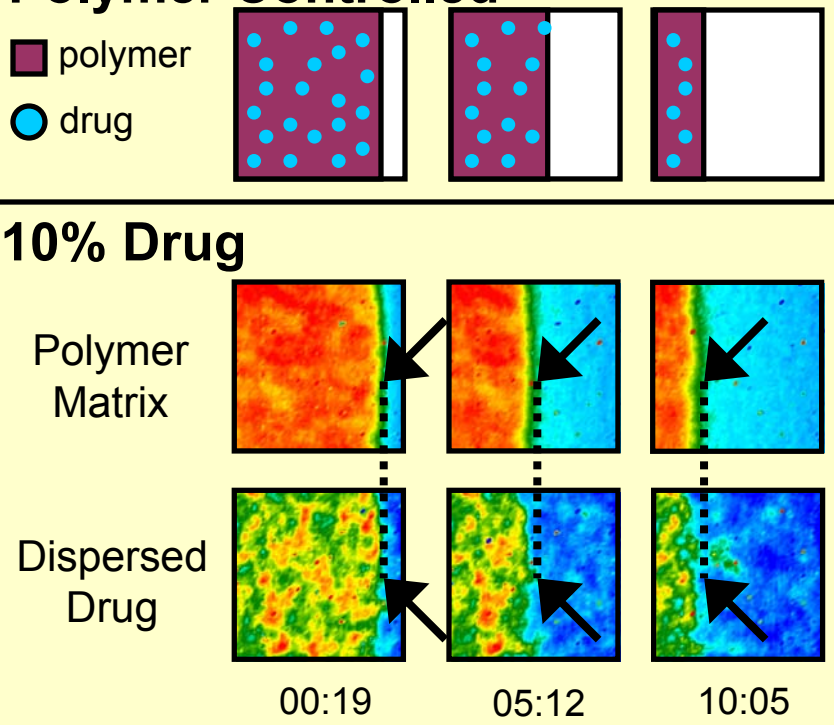
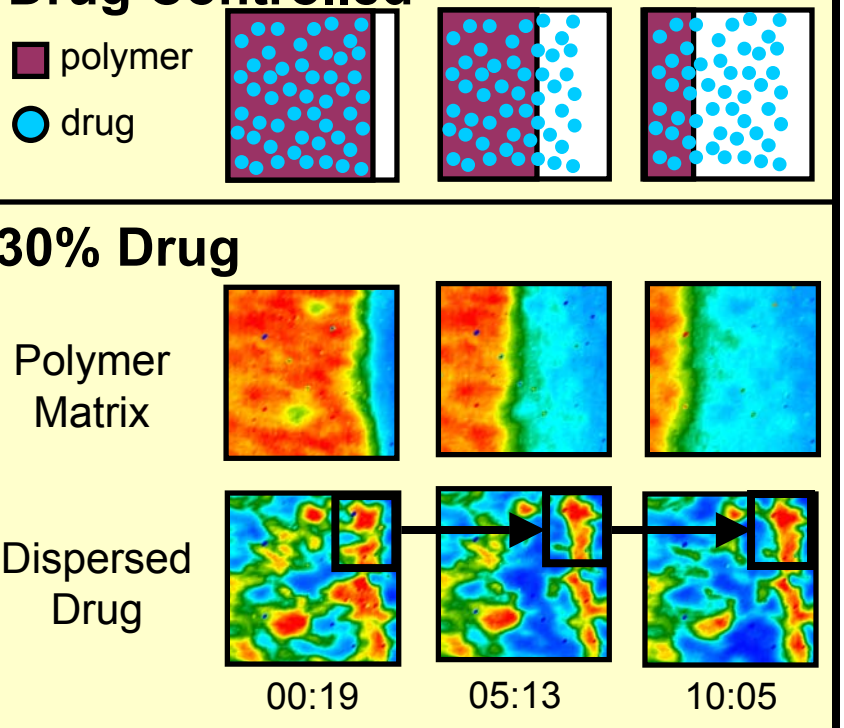
Polymer Controlled



At 10 (wt)% drug concentration, the dissolution of the drug (testosterone) is concurrent with the recitation of the polymer front, resulting in the favorable polymer-controlled drug release.

Drug Controlled



The sustained presence of the drug after the dissolution of the polymer indicates the conversion of the drug (to the therapeutic aqueous form) is dependent on the dissolution of the drug rather than the polymer matrix.